Two days in the Life of an Asset Manager

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&

Ben Sadtler

Disclaimer: nothing that follows is a recommendation or solicitation to buy, hold, or sell any security or investment.

Building "the pie" – the process

- Stocks
  - US stock analysis
  - International stock analysis
  - Mutual funds and ETFs
- Bonds
  - Corporate, High-Yield, Municipal
  - Mutual funds and ETFs
- Alternative strategies
  - Very quickly
- Final portfolio results & monitoring
- Additional considerations
  - Health care expenses in retirement
  - LTC Overview

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Recall the Morningstar models

Asset Class	Very Consv.	Consv.	Moderate	Mod. Agg.	Aggressive
US Stock	12%	26%	36%	46%	56%
Intl. Stock	5%	11%	15%	19%	22%
Bonds	65%	50%	35%	25%	[illegible]
Alternatives	3%	3%	9%	[illegible]	[illegible]
Cash	15%	10%	5%	[illegible]	[illegible]
Avg. Return	4.26%	5.68%	7.17%	[illegible]	[illegible]
Avg. Risk	6.03%	8.37%	11.26%	[illegible]	[illegible]

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What is a bond?

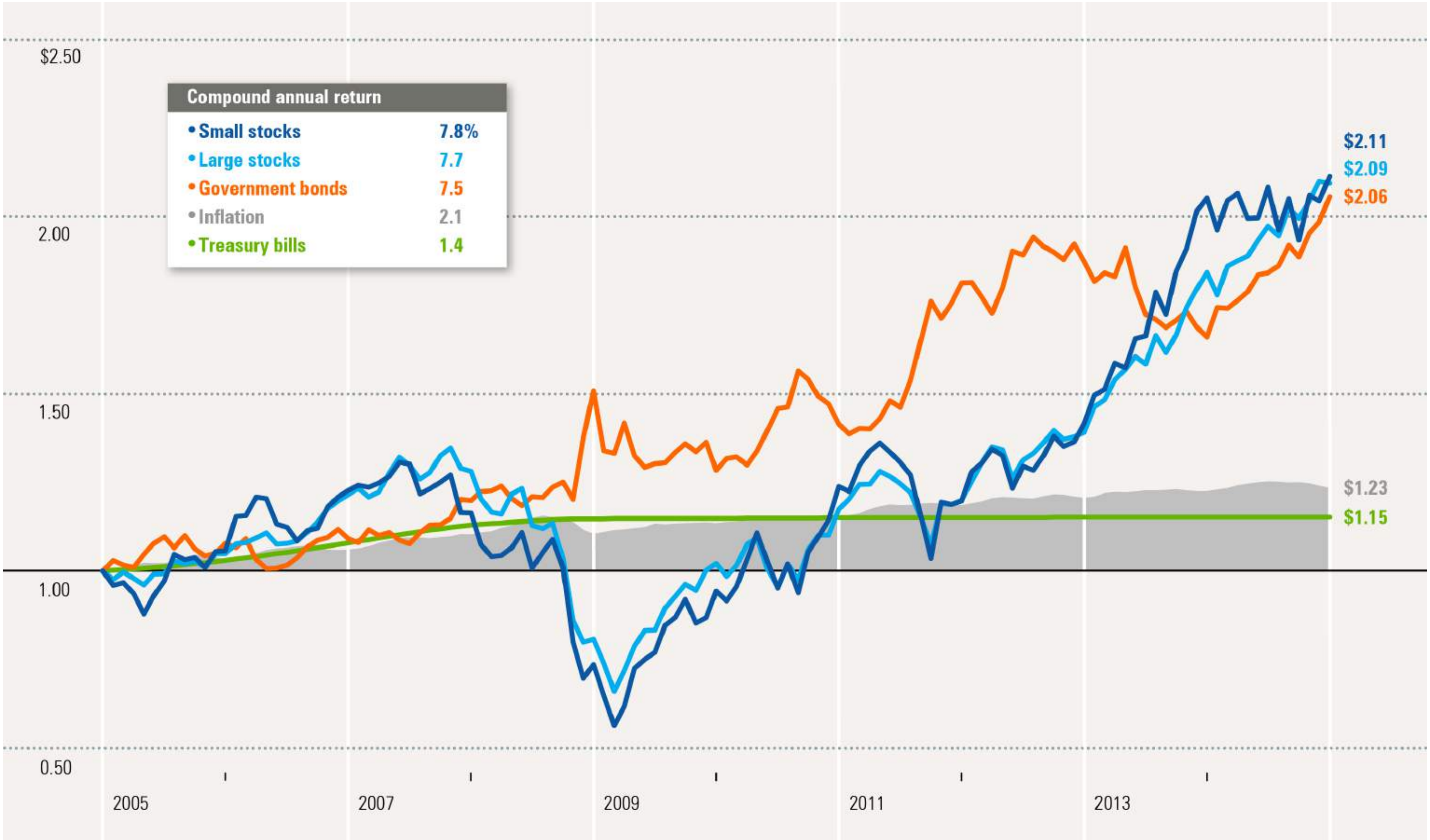
It's basically debt.

Ibbotson® SBBI®

Stocks, Bonds, Bills, and Inflation 1995–2014

•Past performance is no guarantee of future results. Hypothetical value of $1 invested at the beginning of 1995. Assumes reinvestment of income and no transaction costs or taxes. This is for illustrative purposes only and not indicative of any investment. An investment cannot be made directly in an index. © 2015 Morningstar. All Rights Reserved.

The Past 10 Years
2005–2014



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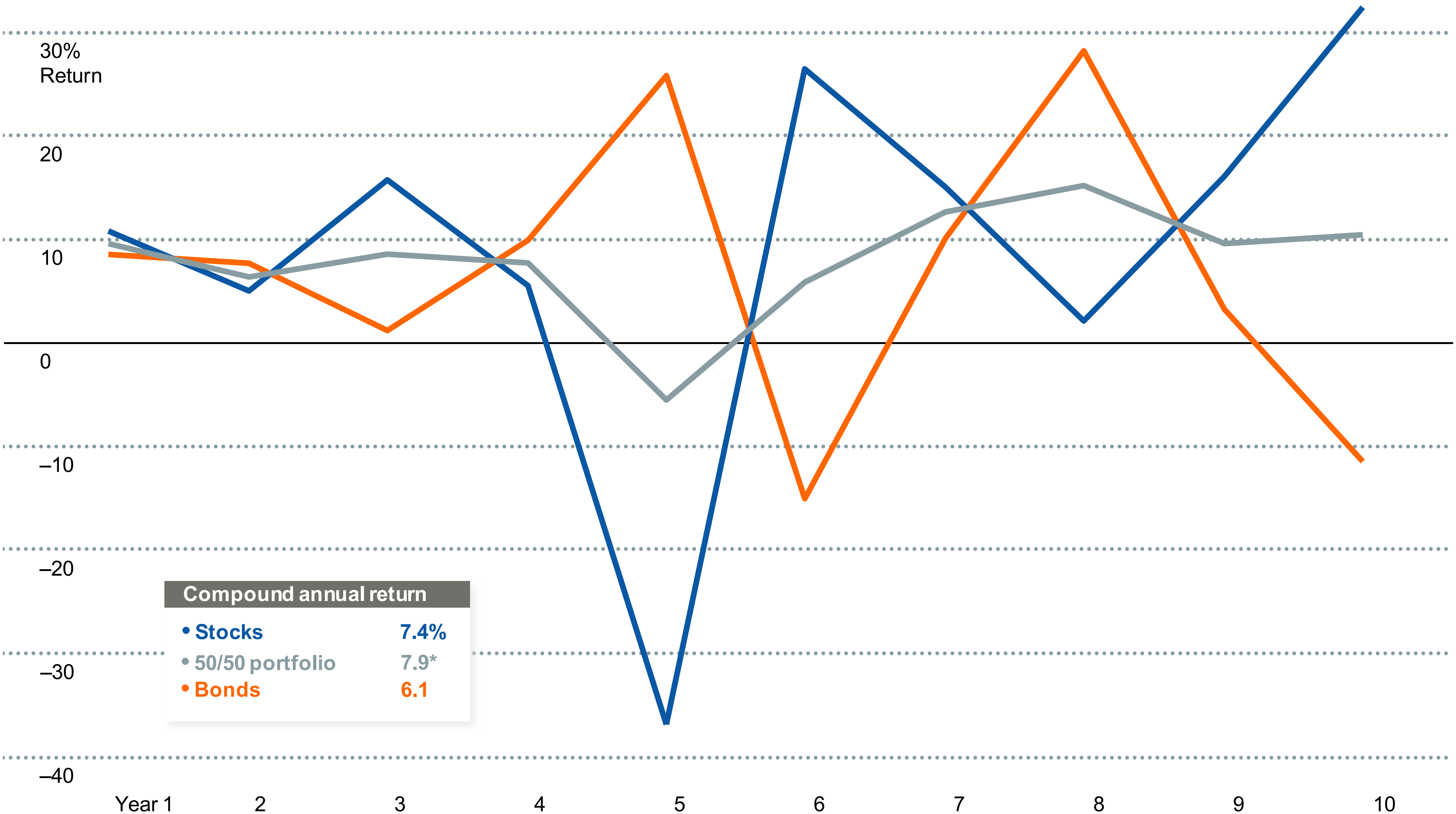
The Case for Diversifying

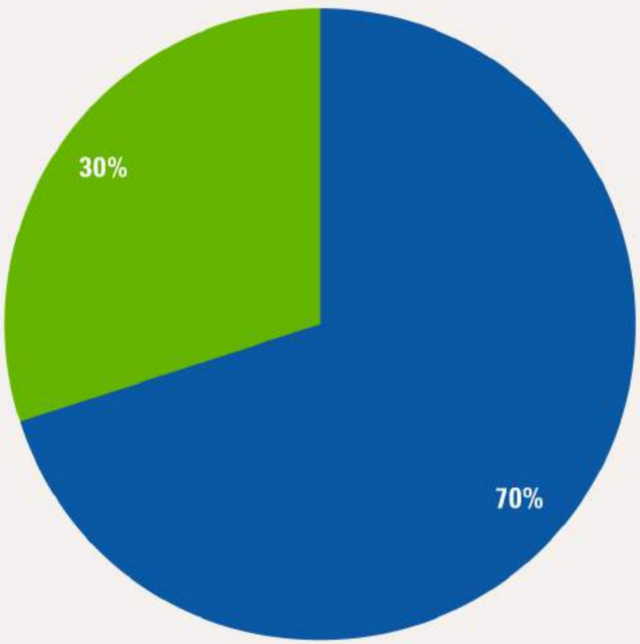
2004–2013



•**Past performance is no guarantee of future results.** *The return of the portfolio is higher than the returns of the constituent asset classes due to a phenomenon called "the rebalancing bonus," which occurred due to the unusual behavior of stocks and bonds over the time period analyzed. This is for illustrative purposes only and not indicative of any investment. An investment cannot be made directly in an index. © 2014 Morningstar. All Rights Reserved.

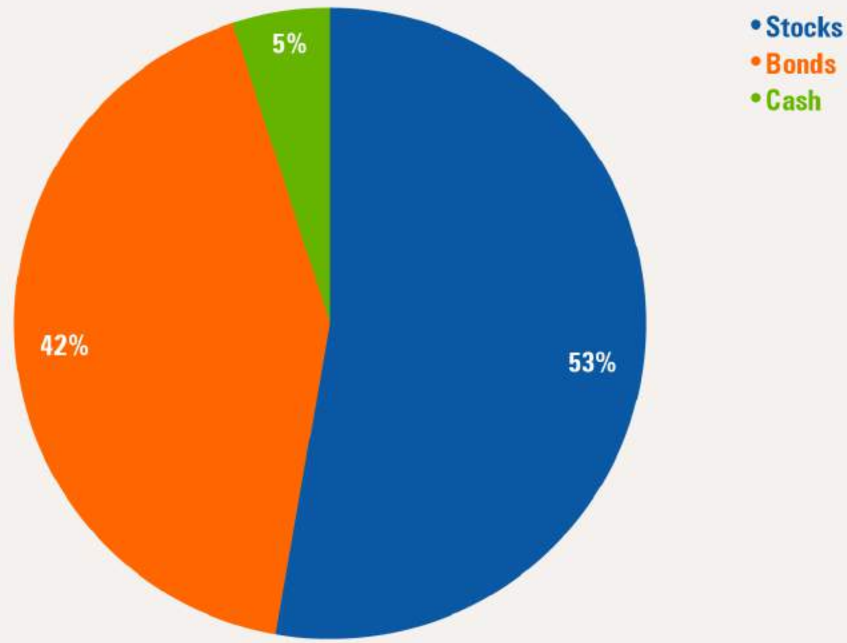
Adding a Bond Allocation to Diversify
1970–2014

Original portfolio



Return	9.9%
Risk	12.3%

Lower risk portfolio



Return	9.9%
Risk	9.8%

•Past performance is no guarantee of future results. Risk is measured by standard deviation. Risk and return are based on annual data over the period 1970–2014. Portfolios presented are based on modern portfolio theory. This is for illustrative purposes only and not indicative of any investment. An investment cannot be made directly in an index.

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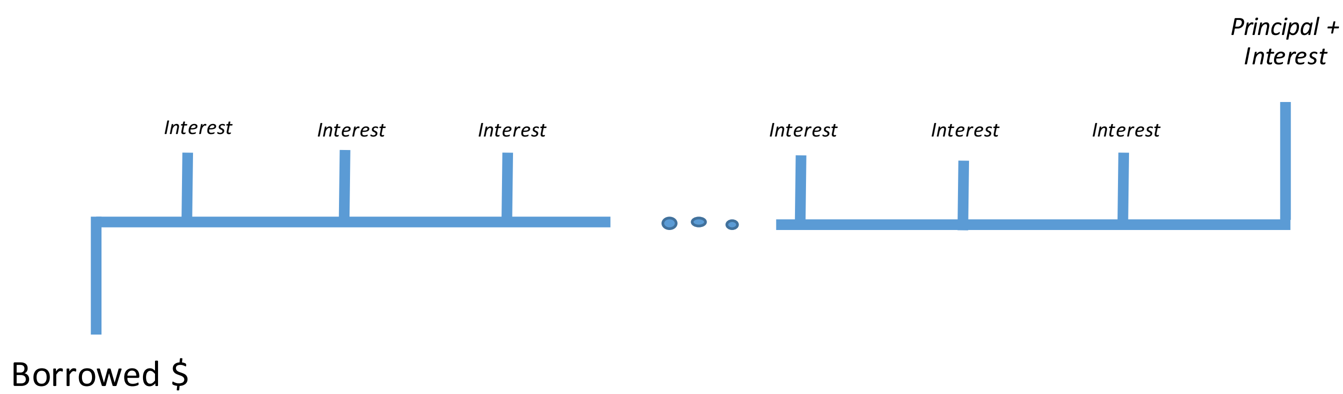
Debt

- *Self-Amortizing Loans* – A loan where every payment includes not only interest but a portion of principle, i.e. Conventional Mortgage
- *Term Loan* – A loan where payments consist of interest only, and principle is paid at the termination of the loan, i.e. IOU, Interest-Only Mortgage, Typical Bank Loan
- Bonds are a form of debt. Bonds are loans, or IOUs, but you serve as the bank. You loan your money to a company, a city, the government – and they promise to pay you back in full, with regular interest payments.



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Bonds

- Why Do Bonds Exist?
  - Part of the financing arsenal that a corporation has at it’s disposal to finance the ongoing operation of the business.
  - Don’t require special reporting like having shareholders.
  - Doesn’t require giving up ownership of the business!

A loan shark… get it!?

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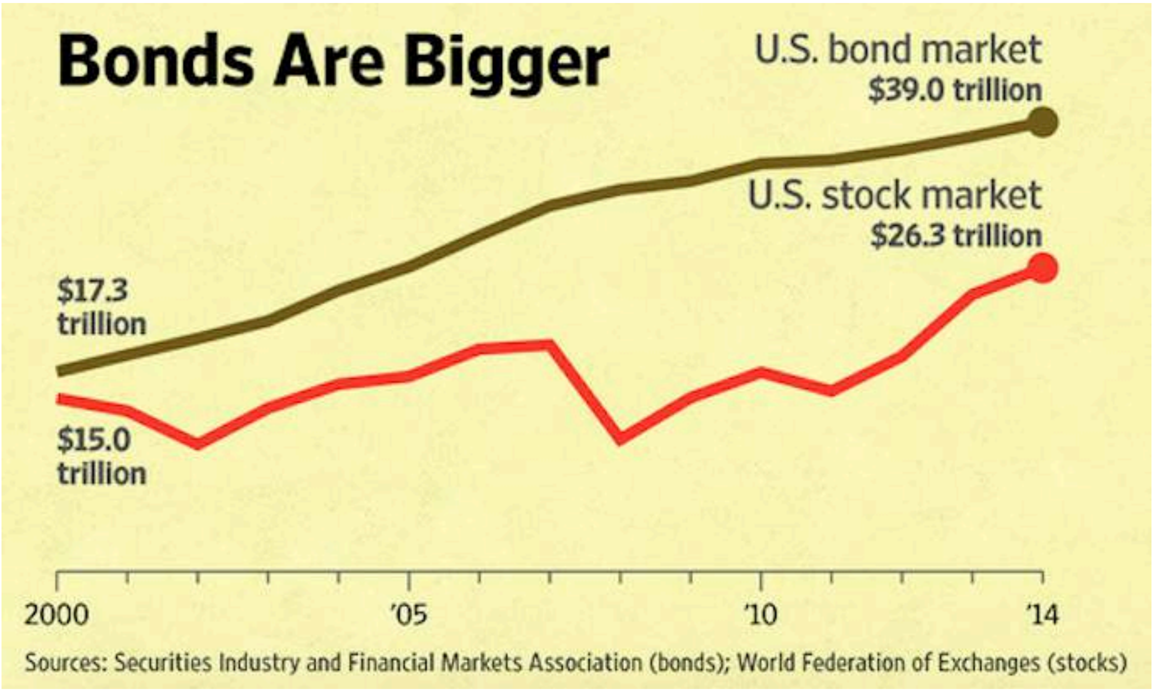
Bond Market



Source: Wall Street Journal

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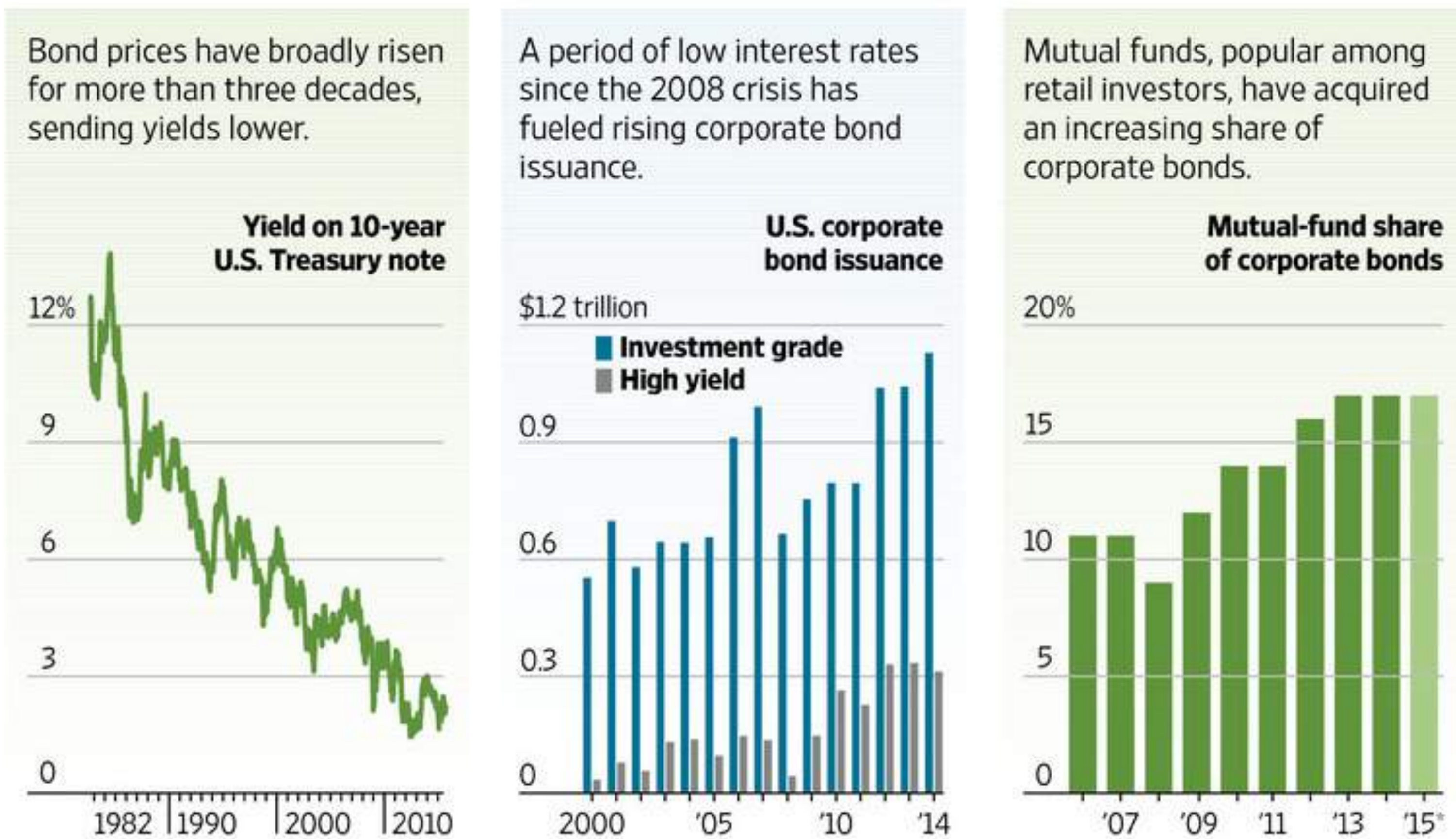
Bond Market



Sources: FactSet (yields); Sifma (issuance); Investment Company Institute (share, flows); Federal Reserve Board (share); Interactive Data (liquidi

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Investing in Stocks and Bonds

Stocks

- Ownership in a corporation
- Voting rights
- Historically higher returns
- More risk – bottom of the capital structure

Bonds

- Income generation
- Potential growth
- Capital Preservation
- Portfolio Diversification
- Lower risk – senior debt is top of the capital structure

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Bond Characteristics

Issuer

What type of entity issued the Bond. These vary from the U.S. Government which issues Treasury Bills & Bonds, Agencies such as Freddie Mac or Fannie May, Local Governments which issue Tax-Free Municipal Bonds, and finally Corporations. The issuer can also be a Domestic or International Entity.

Term

This is the period of time that debt instrument exists before the principle is paid back to the Payee. They also range from time periods as short as 30 days for T-Bills, to 30 year Treasury Bonds. Most of the other entities will issue bonds in a variety of timeframes extending, classified as Short, Intermediate and Long-term.

Credit Quality

The amount of interest that is paid on a particular bond depends on the credit quality of the issuing entity. The lowest risk issuer is the U.S. Government, all other entities will require a premium to be paid over that of a similar government bond. This is known as a spread. High yield requires the highest yield.

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Bond Basics – Considerations

- Longer term bonds usually pay higher interest rates
- Risky bonds pay higher interest rates
- Everything is Riskier than U.S. Government Bills & Bonds

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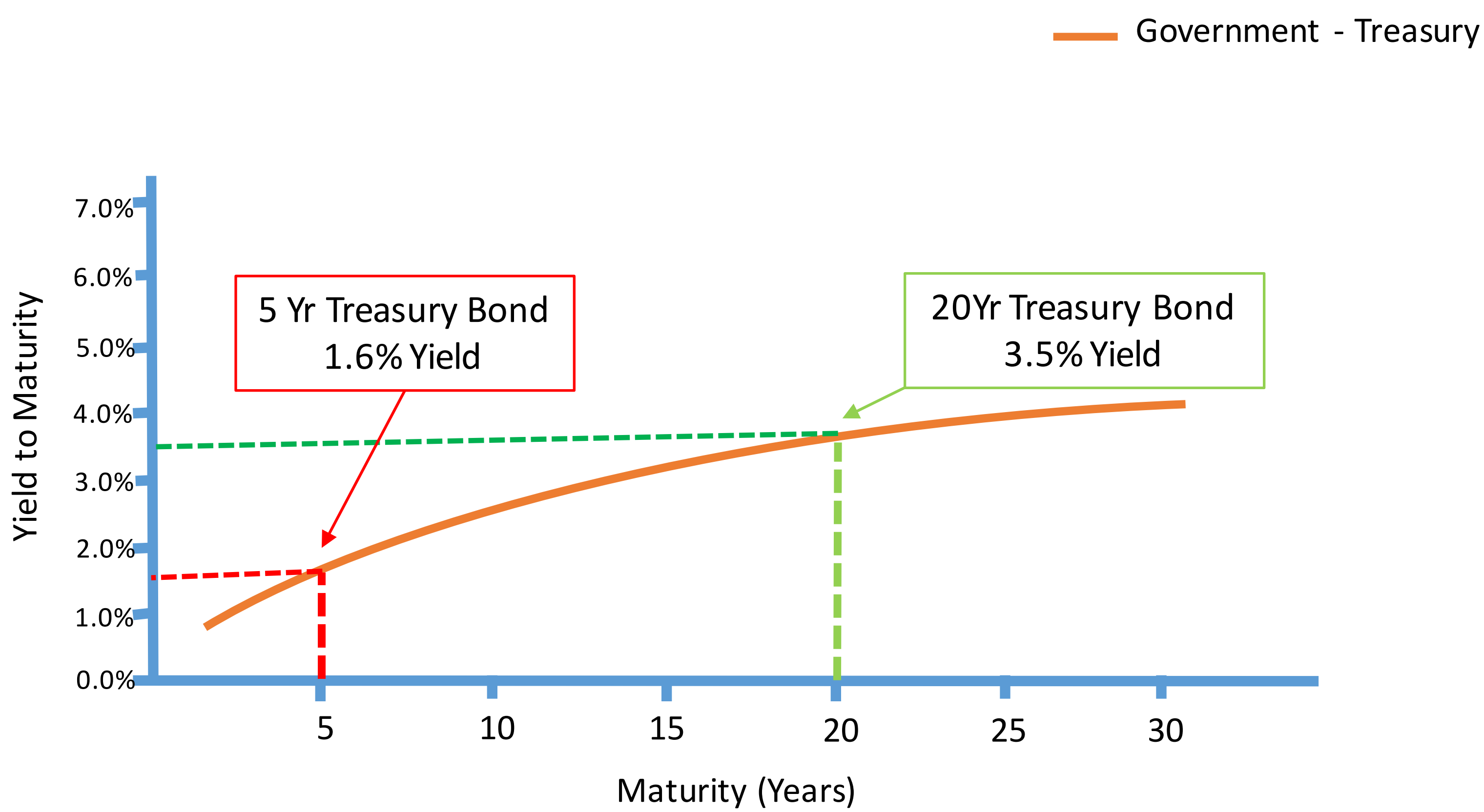
Hypothetical Yield Curve



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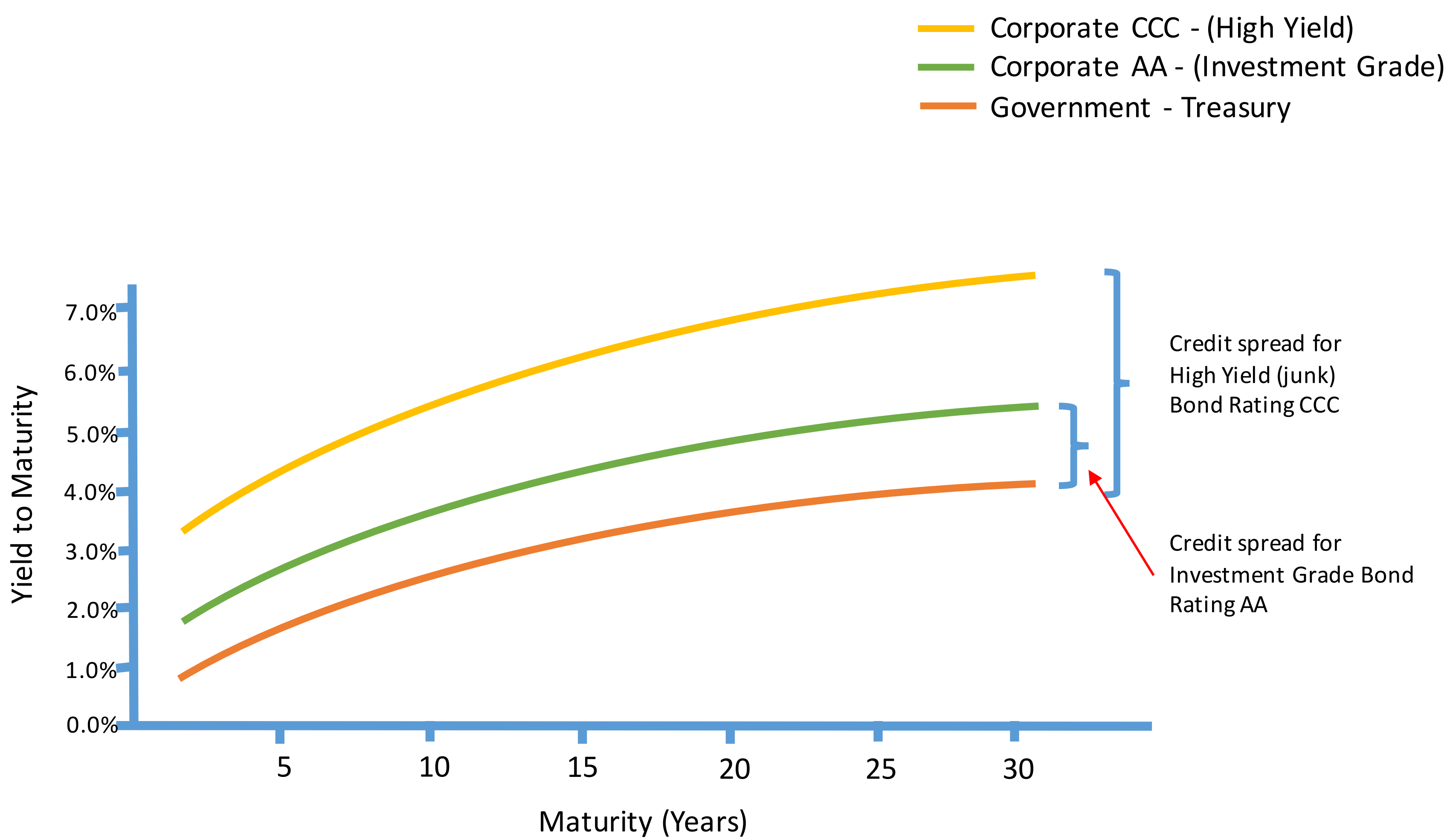
Hypothetical Yield Curve



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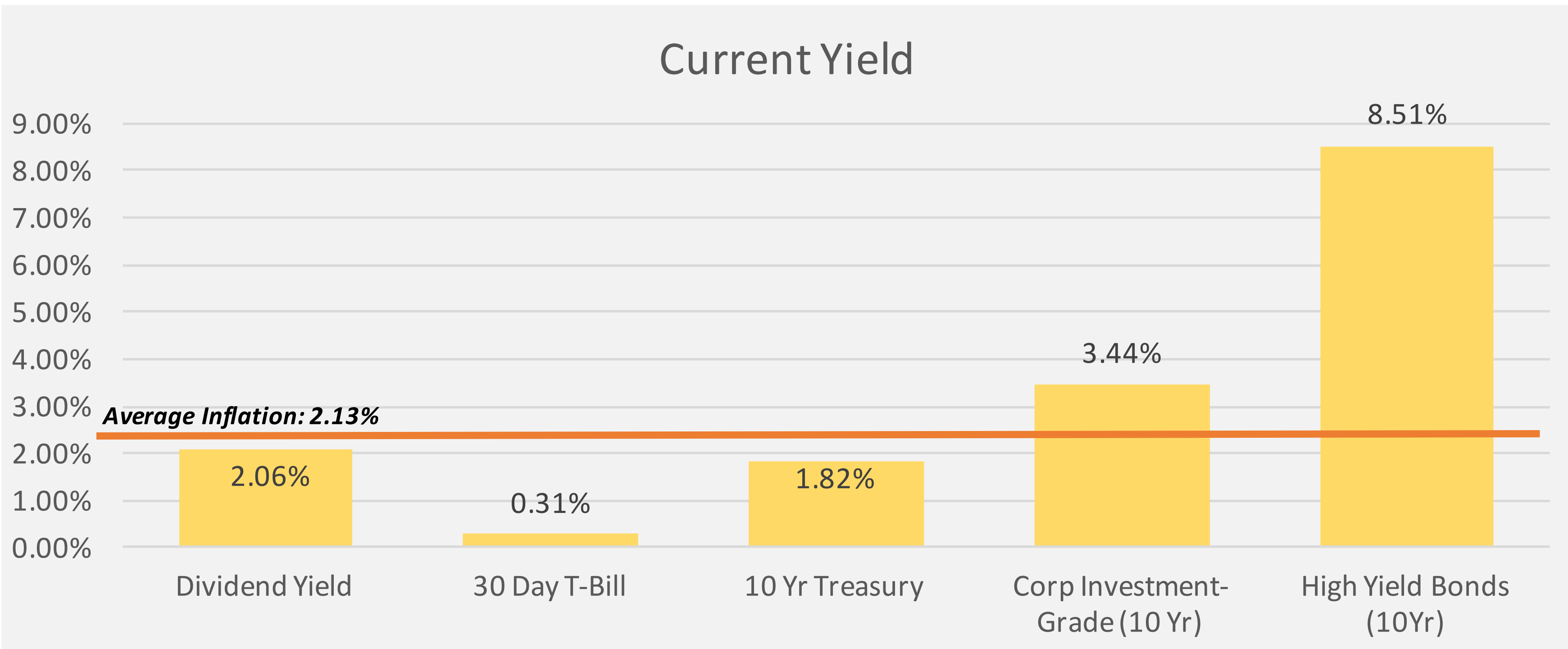
Current Yield Landscape

As of March 2016



Source: 30-Day Treasuries – 30-day U.S. Treasury bill & 10-year Treasuries – 10 Constant Maturity US Government bond & Consumer Price Index, Average inflation is from 2005-2014, St. Louis Federal Reserve, FRED; US Stocks Dividend Yield – Professor Damoradan's New York University Stern School of Business website; Corporate Investment Grade Bond – Barclay's Capital US Corporate Index; Emerging Market Bonds – J.P.Morgan Emerging Market Bond Index, Corporate High Yield Bonds – Barclays Capital US Corporate High-Yield Index.

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Bond Basics

- **Interest rates** - probably have the single largest impact on bond prices. As interest rates rise, bond prices fall. That's because when rates climb, new bonds are issued at the higher rate, making existing bonds with lower rates less valuable.
- Also known as "Interest Rate Risk"

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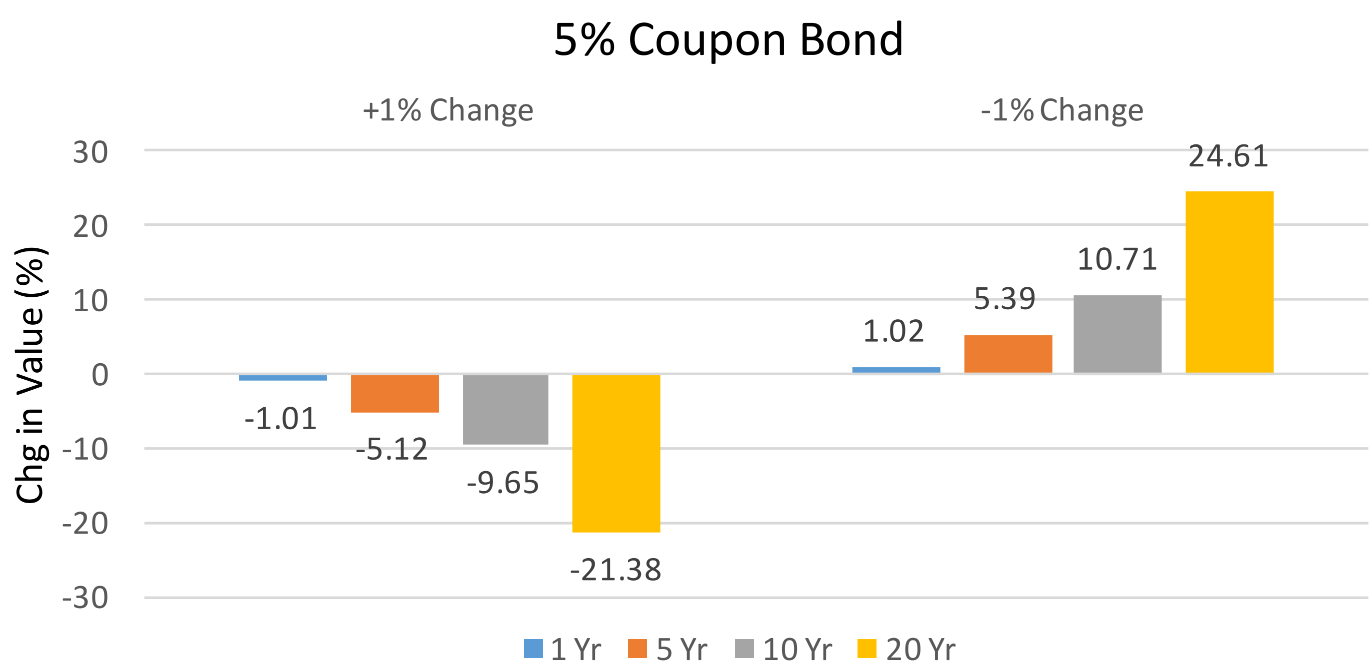
Bond Basics

- **Duration** is a measure of a bond price's sensitivity to a change in interest rates, measured in years. Bonds with longer durations are more sensitive to interest rate changes.



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Bond Basics

- If you purchased your bond at initial offering and hold it until maturity, it doesn't matter how much the price fluctuates. Your interest rate was set when you bought it, and when the term is up, you'll receive the face value (the money you initially invested) of the bond back — so long as the issuer doesn't go out of business (Default).

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Bond Basics – Initial Offering

- Issuer – Corporate, Government (Federal or State), or Agency
- Term – Number of Years until Maturity
  - Call Date – Premature termination of Bond, at issuers discretion
- Par Value – Initial offering price ($1,000 or $5,000)
- Quality – Bond Rating
- Interest Rate – Amount of periodic payment
- Country of Origin

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Prospectus Supplement
(To Prospectus dated April 29, 2013)

$12,000,000,000

Company XYZ

Ratings:
Moody's – Aa1
Fitch – AA+
S&P - NR

$1,000,000,000 Floating Rate Notes due 2017
$1,000,000,000 Floating Rate Notes due 2019
$1,500,000,000 1.05% Notes due 2017
$2,000,000,000 2.10% Notes due 2019
$3,000,000,000 2.85% Notes due 2021
$2,500,000,000 3.45% Notes due 2024
$1,000,000,000 4.45% Notes due 2044

We are offering $1,000,000,000 of our Floating Rate Notes due 2017 (the "2017 Floating Rate Notes"), $1,000,000,000 of our Floating Rate Notes due 2019 (the "2019 Floating Rate Notes" and, together with the 2017 Floating Rate Notes, the "floating rate notes"), $1,500,000,000 of our 1.05% Notes due 2017 (the "2017 Fixed Rate Notes"), $2,000,000,000 of our 2.10% Notes due 2019 (the "2019 Fixed Rate Notes"), $3,000,000,000 of our 2.85% Notes due 2021 (the "2021 Fixed Rate Notes"), $2,500,000,000 of our 3.45% Notes due 2024 (the "2024 Fixed Rate Notes"), and $1,000,000,000 of our 4.45% Notes due 2044 (the "2044 Fixed Rate Notes" and, together with the 2017 Fixed Rate Notes, the 2019 Fixed Rate Notes, the 2021 Fixed Rate Notes and the 2024 Fixed Rate Notes, the "fixed rate notes"). We refer to the floating rate notes and the fixed rate notes collectively as the "notes."

The 2017 Floating Rate Notes will bear interest at a floating rate equal to three-month LIBOR plus 0.07% and the 2019 Floating Rate Notes will bear interest at a floating rate equal to three-month LIBOR plus 0.30%. We will pay interest on the floating rate notes quarterly in arrears on February 6, May 6, August 6 and November 6 of each year, beginning on August 6, 2014. We will pay interest on the fixed rate notes semi-annually in arrears on May 6 and November 6 of each year, beginning on November 6, 2014. The 2017 Floating Rate Notes will mature on May 5, 2017 and the 2019 Floating Rate Notes will mature on May 6, 2019. The 2017 Fixed Rate Notes will mature on May 5, 2017, the 2019 Fixed Rate Notes will mature on May 6, 2019, the 2021 Fixed Rate Notes will mature on May 6, 2021, the 2024 Fixed Rate Notes will mature on May 6, 2024, and the 2044 Fixed Rate Notes will mature on May 6, 2044.

We may redeem the fixed rate notes in whole or in part at any time or from time to time at the redemption prices described under the heading "Description of the Notes—Optional Redemption" in this prospectus supplement. The floating rate notes may not be redeemed before maturity. The notes will be issued only in denominations of $2,000 and any integral multiple of $1,000 in excess thereof.

See " Risk Factors " beginning on page S-5 to read about important factors you should consider before buying the notes.

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Bond Basics - Corporate

- Issuer: Company XYZ
- Coupon: Interest Rate – 2.85%
  - Coupon Rate = Yield
- Payment Dates: May & November
- Term: 2021 or 8 years when originally issued 5/2013
- Par: $1,000

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Bond Basics – Secondary Market

- If you need to sell your bond on the secondary market – before it matures – you could get less than your original investment back.

- So for example, what happens to the price of the bond 1 minute after it's initial offering, if…..
  - Rates increase by 1.0% for similar bonds and/or,
  - Rates decrease by 1.0%

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Bond Basics – Secondary Market

+ 1.0% Interest Rate Increase

Bond Valuation Example		
Face Value	$1,000	
Annual Coupon Rate	2.85%	
Annual Required Return	3.85%	
Years to Maturity	8.0	
Payment Frequency	2	
Value of Bond	$931.71	**Discount**

- 1.0% Interest Rate Decrease

Bond Valuation Example		
Face Value	$1,000	
Annual Coupon Rate	2.85%	
Annual Required Return	1.85%	
Years to Maturity	8.0	
Payment Frequency	2	
Value of Bond	$1,074.04	**Premium**

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Municipal Bonds

NEW ISSUE

Ratings: Fitch: AAA
Moody's: Aaa
Standard & Poor's: AAA
(See "RATINGS" herein)

In the opinion of Bond Counsel, under current law and subject to the conditions described herein in the section entitled "TAX MATTERS", interest on the Bonds (a) will not be included in gross income of the owners thereof for Federal income tax purposes, (b) will not be an item of tax preference for purposes of the Federal alternative minimum tax imposed on individuals and corporations, and (c) will be exempt from income taxation by the Commonwealth of Virginia. Such interest may be included in the calculation of a corporation's alternative minimum income tax, and a holder may be subject to other Federal tax consequences as described herein.

$236,230,000
COMMONWEALTH OF VIRGINIA

$18,470,000	$217,760,000
General Obligation Bonds	**General Obligation Refunding Bonds**
Series 2013A	**Series 2013B**

Dated: Date of Delivery **Due: June 1, as shown on inside cover**

This Official Statement has been prepared by the Commonwealth of Virginia to provide information on its General Obligation Bonds, Series 2013A (the "2013A Bonds") and General Obligation Refunding Bonds, Series 2013B (the "2013B Bonds" and together with the 2013A Bonds, the "Bonds"). Selected information is presented on the cover page for the convenience of the user. To make an informed decision regarding the Bonds, a prospective investor should read this Official Statement in its entirety.

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Munis

- A municipal bond is a bond issued by a local government, or their agencies.
- Revenue & General Obligation
- A huge market: $3.7 Trillion (2011, SEC).
- Interest is federally tax-free, and if purchased in the resident state they are state tax-free.
- If purchasing a out of state bond they are still federally tax-free

Question: If I can buy a corporate bond with an interest rate of 6%, or a VA muni with a interest rate of 5%, which one offers the higher return?

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Munis

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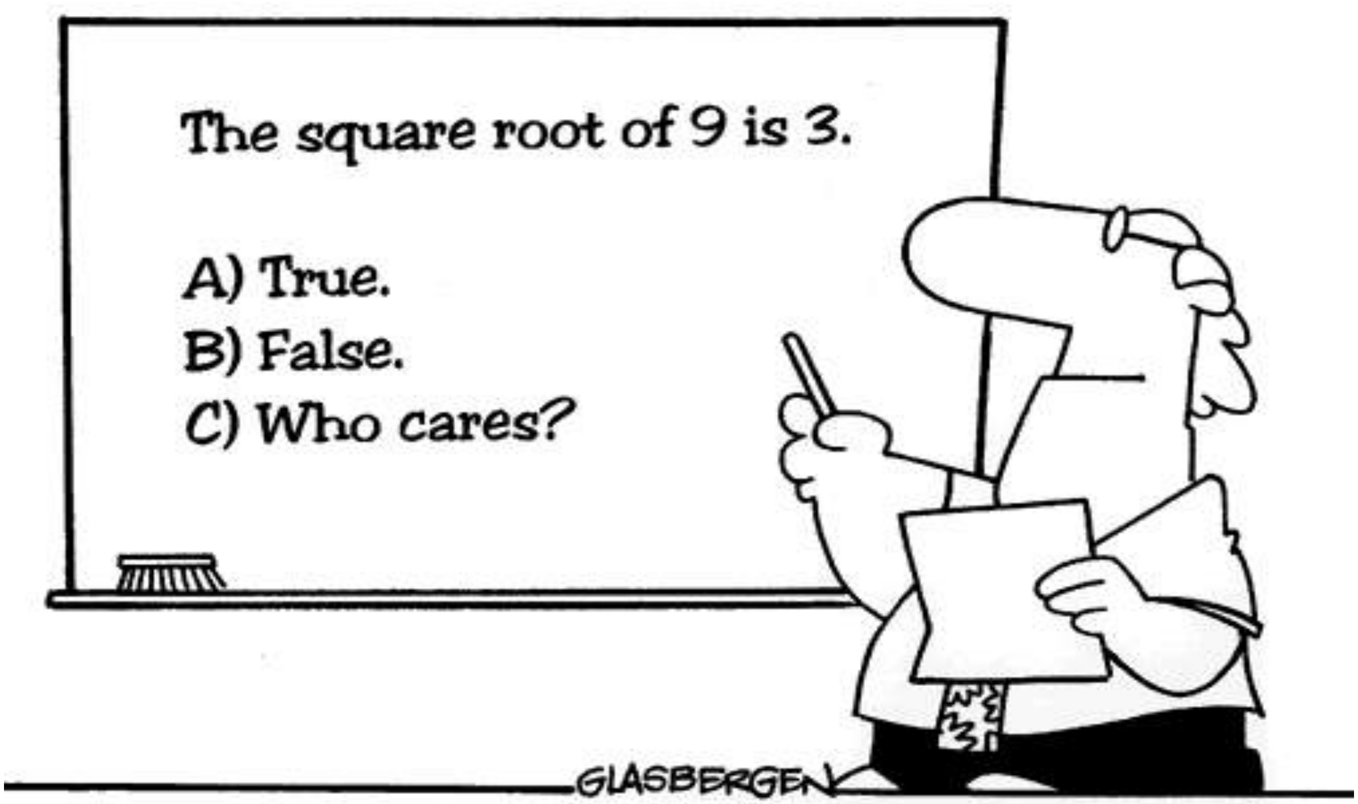

Many students actually look forward to Mr. Atwadder's math tests.

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Munis

Tax-Equivalent Yield

$$\frac{\text{Interest Rate of Muni Bond}}{(1 - (\text{Federal Marginal Tax Rate} + \text{State Tax Rate})}$$

Example: 20 year Virginia Bond , 5% Interest Rate, Federal Tax Rate 28%, State 5.75%

$$\frac{.05}{1 - (.28 + .0575)} = .0755 \sim 7.6\%$$

Even better if you purchased MD Bond, out-of-state

$$\frac{.05}{1 - (.28)} = .0694 \sim 7.0\%$$

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Popular Bond Strategies

- Capital Preservation & Liquidity
- Current Income
- Asset/Liability Matching
- Tax Liability Management
- Laddering

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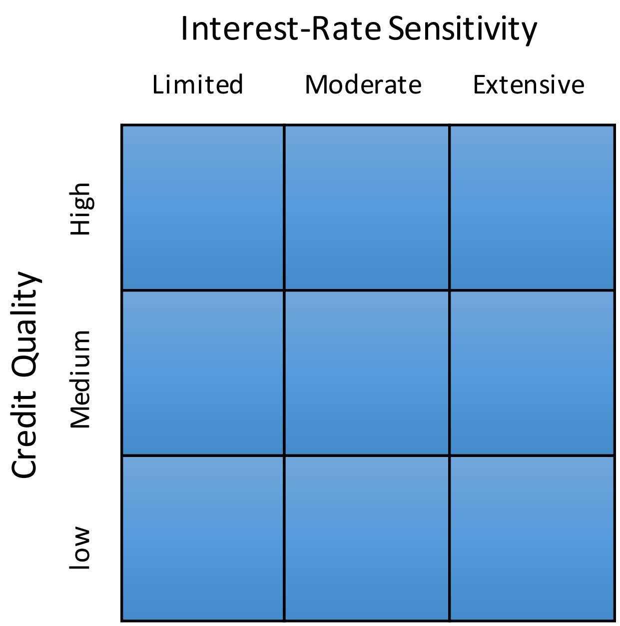
Debt Market Structure

Morningstar Model



Credit Quality:

Based on average credit rating of the bond portfolio as rated by third party rating agencies

- High - > AA- (Investment Grade)
- Medium – <AA- & >= BBB- (Investment Grade)
- Low – <BBB- (High Yield)

Interest-Rate Sensitivity:

Based on the calculated duration of the current marketplace.

- Limited – <= 3.5 years
- Moderate - > 3.5 & <= 6 years
- Extensive - > 6 years

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Evaluating Bond Mutual Funds

Criteria	What's the question?	Indicator
Parent Co.	Who "owns" the fund?	FYI
Expense	How much does the fund charge?	Lower = better
Current Yield	What is the is the current income being received?	Based on risk tolerance
Duration	What is the price sensitivity to interest rate changes?	FYI, Tactical positioning
Avg Credit Rating	What is the riskiness of the overall portfolio?	FYI, Tactical positioning
Manager Tenure	How long has the manager run the fund?	Longer = better
Management Structure	Individual or team?	FYI
Manager Investment	Does the manager have $$ invested in his own fund?	Yes = good
Historical Performance	How has the fund performed over the past X years?	Better = better
Holdings	Are the holdings consistent with the fund's objective? How many?	Yes = good, More = better
Share Class	What share class are you purchasing?	Share class is appropriate

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Tactical use of Duration

If interest rates are expected:

1) to rise, a lower duration is better since bond prices will decline
2) to decline, a higher duration is better since bond prices will increase

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Tactical use of Credit Rating

If your objective is to increase the current yield of a portfolio, you might want to consider investing a portion of your portfolio in debt with a low-rating (high yield), utilizing corporate bonds or municipals.

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Evaluating Bond Mutual Funds

Criteria	What's the question?	Indicator
Parent Co.	Who "owns" the fund?	FYI
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Evaluating Bond Mutual Funds

* Compared to peers

Fund Name	Fund Co.	Yield	Duration	Avg Credit	Ownership	Tenure	Expense	10 Yr Return*
Short-Term Bond	Company A	1.49	1.89	A	$500K+	11.17	0.52	47th
Short Duration Strat Inc.	Company B	4.68	-0.26	BB	<$50k	4.29	0.81	2nd
Short Duration income	Company C	4.11	1.86	BB	$1mm +	10.81	0.49	12th
Short Duration Income	Company D	2.15	2.46	BBB	$50 - $100k	3.81	0.62	25th

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Co. D Short-Duration Income

Annual Turnover	Category Avg Turnover
206%	94%
Stock Holdings (Long)	**Stock Holdings** (Short)
1	0
Yield (TTM)	**Assets in Top 10 Holdings**
1.89%	25.93%
Bond Holdings (Long)	**Bond Holdings** (Short)
300	0

- Very High Turnover
- Poor Diversification
  - 300 Holdings/26% in Top 10
  - Potentially a lot of firm specific risk
- Sub par yield
- 1 Stock ???
- BBB

Co. C Short Duration Income

Annual Turnover	Category Avg Turnover
59%	94%
Stock Holdings (Long)	**Stock Holdings** (Short)
0	0
Yield (TTM)	**Assets in Top 10 Holdings**
4.11%	7.09%
Bond Holdings (Long)	**Bond Holdings** (Short)
1,105	12

- Very Low Turnover
- Well Diversified Holdings
  - 1,105 Holdings/7.09% in Top 10
  - Helpful since HY Short Duration will invariably contain some low quality holdings
- Good yield
- BB

Bond Index

- A bond index is a grouping of bonds constructed to measure past performance and trends
- An index can be used for a proxy for how the "market" is performing in point and percentage terms (benchmark)
- Indices are constructed of various firms
  - *Barclay's Aggregate Bond Index* - The index measures the performance of the U.S. investment grade bond market..
  - *Barclay's Global Aggregate Bond Index* – The index measures the performance of global investment grade debt from twenty-four local currency markets.
  - *Barclays US Municipal Bond Index* – The index measures the investment grade, US dollar-denominated, fixed tax exempt bond market.

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Alternative Strategies
“Liquid Alts”

Alternative Strategies

- An investment that is not one of the three traditional assets classes (stocks, bonds and cash). Include hedge funds, managed futures, real estate, commodities and derivatives contracts.
- Traditionally for institutional investors or high-net-worth individuals because of their complex nature, limited regulations and relative lack of liquidity.
- While traditionally these have been illiquid assets a new class has become available to non-institutional investors.
- Alternative mutual funds typically use investment strategies that vary from the common mutual fund buy-and-hold strategy. Generally, an alternative fund holds more nontraditional investments and employs more complex trading strategies that may include hedging, leveraging through derivatives or other opportunistic trading.
- Primary reasons for owning is that they are typically far less correlated with any of the traditional asset classes and therefore assist in offsetting overall portfolio risk.
- Indexes are limited.

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Alternative Strategies – A Few Examples

Long/Short Strategies

A nontraditional investment strategy that can potentially benefit from both rising and falling stock prices. The fund manager typically buys stocks they expect to go up (buys "long") and sells short those they expect to decline ("short selling" or "shorting"). This approach may limit market risk (volatility), while increasing an investor's opportunity set. Short positions may serve as a potential hedge, as well as a source of additional returns.

Credit Strategies

Credit strategies focus on credit related securities while reducing sensitivity to movements in interest rates. Funds may follow either long or long/short mandates.

Global Macro Strategies

Global Macro funds seek to profit from large economic and political changes in various markets around the world. The strategy utilizes forecasts and analysis of macroeconomic principles to take long and short positions in global equities, bonds, commodities, and currencies in the form of cash positions or derivatives.

Commodity Strategies

Commodity investment strategies are commonly index-based, providing access to energy, metals and agricultural markets with weightings often predefined based on the underlying index methodology. The majority of commodity funds are long only.

Not a recommendation to buy, hold, or sell any investment or security. Each individual's risk tolerance is different

Evaluating Alternative Mutual Funds

Funds within this category seek to allocate to multiple managers that are pursuing nontraditional investment strategies, thereby providing exposure to a diversified portfolio of alternative investment strategies. The multi-strategy discipline provides managers additional flexibility to pursue opportunities that would not otherwise be available to them in a single-strategy public fund.

Criteria	What's the question?	Indicator
Parent Co.	Who "owns" the fund?	FYI
Expense	How much does the fund charge?	Lower = better
Strategies Covered	Which Alt Strategies are covered?	FYI
Management Structure	Which management groups and how many are included?	FYI
Manager Investment	Does the manager have $$ invested in his own fund?	Yes = good
Historical Performance	How has the fund performed over the past X years?	Better = better
Share Class	What share class are you purchasing?	Share class is appropriate

Not a recommendation to buy, hold, or sell any investment or security. Direct investment cannot be made in an index

Evaluating Alt Mutual Funds

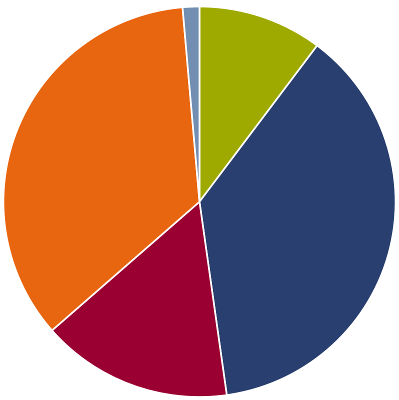
* Compared to peers

Fund Name	Fund Co.	# of Strategies	Yield	Dom Strat	Ownership	Tenure	Expense	3 Yr Return*
Absolute Return Multi-Mgr	A	12	0.00	Long/Short Equity	$2M+	3.83	2.35	75th
Global Multi-Strategy	B	8	.53	Long/Short Equity	$220K+	4.42	1.99	29th
Multi-Manager Alt Strat Port	C	9	2.96	Global Macro	<$50k	3.92	2.11	66th
Masters Alt Strat	D	5	2.99	Eql Wgth'd	$700K+	4.50	1.49	20th

Not a recommendation to buy, hold, or sell any investment or security. Direct investment cannot be made in an index

Ending Hypothetical Portfolio

Asset Allocation 02-29-2016



Asset Allocation	Portfolio %	Bmark %
Cash	10.24	4.56
US Stocks	37.54	31.86
Non-US Stocks	15.77	27.95
Bonds	35.07	35.44
Other/Not Clsfd	**1.38**	**0.19**

Source: Morningstar Hypothetical Portfolio Tool, Office

Target Allocation

Asset Class	Moderate
US Stock	36%
Intl. Stock	15%
Bonds	35%
Alternatives	9%
Cash	5%

Not a recommendation to buy, hold, or sell any investment or security. Each individual's risk tolerance is different

Ending Hypothetical Portfolio

Value	Blend	Growth	
48	9	40	Large
1	1	1	Mid
0	0	0	Small

0-10 10-25 25-50 >50

Equity Style	Portfolio	Bmark
Average Market Cap ($mil)	50,797.40	40,906.95
Price/Earnings	19.22	15.96
Price/Book	2.38	1.84
Price/Sales	1.57	1.31
Price/Cash Flow	9.95	9.10

Investment Style 02-29-2016

Ltd	Mod	Ext	
0	0	0	High
0	0	0	Med
88	0	0	Low

0-10 10-25 25-50 >50

Fixed-Income Style	Portfolio	Bmark
Effective Duration	1.86	5.13
Effective Maturity	—	—

Portfolio Yield (02-29-2016)	Yield %
12-Month Yield	3.54

Source: Morningstar Hypothetical Portfolio Tool, Office

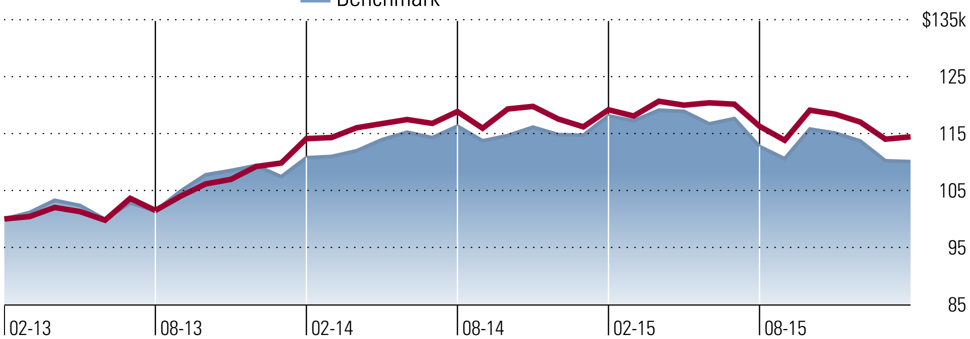
Not a recommendation to buy, hold, or sell any investment or security. Each individual's risk tolerance is different

Portfolio Monitoring

Performance 02-29-2016

Investment Activity Graph — Portfolio — Benchmark

Final Mkt Val: $114,424



Trailing Returns	3 Mo	1 Yr	3 Yr	5 Yr	10 Yr
Portfolio Return	-3.36	-3.98	4.59	—	—
Benchmark Return	-4.37	-6.81	3.25	—	—
+/- Benchmark Return	1.01	2.83	1.34	—	—

Source: Morningstar Hypothetical Portfolio Tool, Office

Risk and Return Statistics	3 Yr	
	Portfolio	Bmark
Standard Deviation	6.77	6.97
Mean	4.59	3.25
Sharpe Ratio	0.70	0.49

Sharpe Ratio – A measure of risk-adjusted return. The higher the better.

Not a recommendation to buy, hold, or sell any investment or security. Each individual's risk tolerance is different

Health Care Expenses
&
LTC Overview

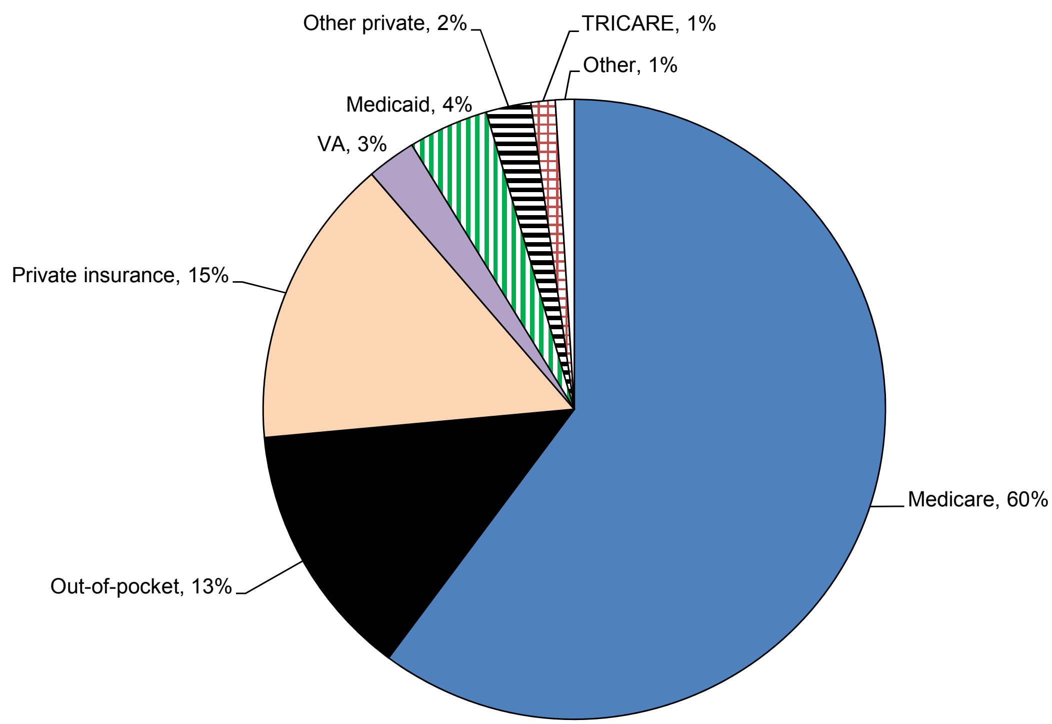
Who’s read something similar to this?

- “Retiree health costs hold steady: Our estimate is $220,000 for a couple, unchanged from 2013, but still daunting.”
  Fidelity

How helpful is this really?

How the bills get paid

Source of Payment for Incurred Health Care Expenses

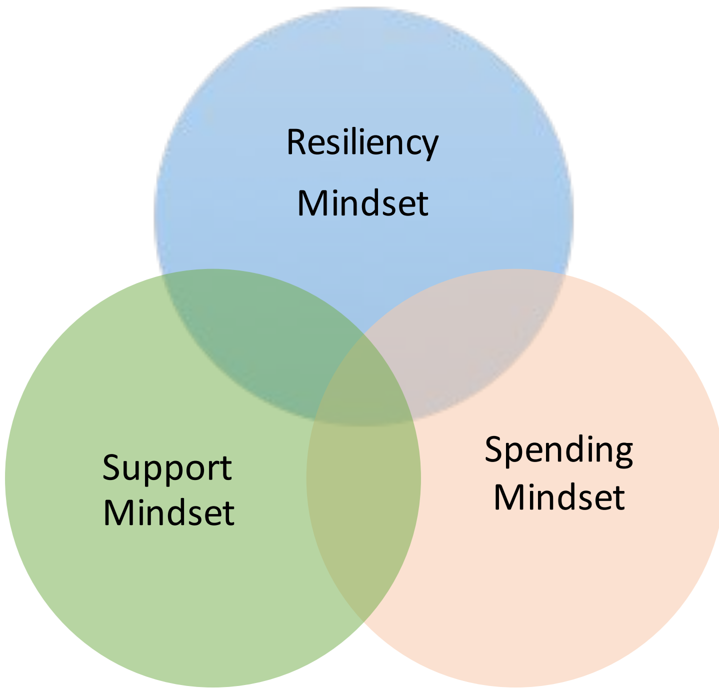


Noninstitutionalized Population of Medicare Beneficiaries, Ages 65 and Older, 2012

Source: Employee Benefit Research Institute estimates from the 2012 Medical Expenditure Panel Survey.

What’s your mindset?

Three mindsets help determine ultimate medical expense,
both OOP & LTC.



- **Resiliency Mindset**
  - How long do you plan to work?
  - Beneficial if Healthy
- **Support Mindset**
  - Living arrangements
  - Family agreements
- **Spending Mindset**
  - Minimizer vs. Maximizer
  - Technophiles
  - Holistic care seekers
  - Great Book – “Your Medical Mind” – Groopman and Hartzband

Source: Carolyn McClanahan

Planning for expenses during retirement

Usable Framework

- Determine "regular" expenditures (traditional financial planning)
- Determine potential health care expenditures
  - What's your health status and health usage mindset
  - Use EBRI* numbers for health care expenses
    - Out-of-Pocket
    - Insurance premiums
    - Deductibles/Co-Pays
  - Add in LTC facility-based costs

* EBRI.org – Employee Benefit Research Institute

Continuum of Care

Community-Based Care

Home Health Care

- Homemaker Services
- Environmental Care
- Meals-on-Wheels
- Chore Services
- Social Workers
- Medical Care
- Home Health Services
- Personal Care
- Rehabilitation
- Nutritional Services

Community Center

- Adult Day Care
- Recreation Services
- Health Screening
- Legal & Financial Counseling
- Education Programs

Long-Term Care Settings

Assisted Living

- Prepared Meals
- Housekeeping
- Laundry Services
- Social Activities
- Preventative Health Services
- Personal Care
- Limited Healthcare

Skilled Nursing Home

- Custodial Care
- Medical Care
- Nursing Care
- Rehabilitation
- Skilled Care
- Post-Acute Care

Hospital

- Acute Medical Care
- Surgery
- Nursing Care
- Rehabilitation

- Home & Home Like
- Independent
- Least amount of health resources utilized

- Least Expensive
- Least Intensive Care

- Institutional
- Dependent
- Most amount of health resources utilized

- Most Expensive
- Most Intensive Care

Genworth – Cost of Care

Screenshot – VA Average Daily Cost

Find your Cost of Care

Click or select a state to view details by location:

Choose a State:

Virginia

Choose a Location:

State Median

Return to National View

2015 Cost of Care Overview

Reference the interactive information below or download the listed resources to find and compare the cost of care.

Home Health Care		Adult Day Health Care[1]	Assisted Living Facility[4]	Nursing Home Care	
Homemaker Services[2]		Annual Cost	Annual Cost	Semi-Private Room[5]	
Annual Cost	5-yr Annual Growth[3]	$17,904	$43,200	Annual Cost	5-yr Annual Growth[3]
$41,184	2%	5-yr Annual Growth[3]	5-yr Annual Growth[3]	$80,483	4%
Home Health Aide[2]		3%	2%	Private Room[5]	
Annual Cost	5-yr Annual Growth[3]			Annual Cost	5-yr Annual Growth[3]
$45,760	1%			$91,250	4%

Source: Genworth Financial, Annual Care Cost 2015

What Will it Cost?

Online Calculator

Home Health Care	2015	2025*
Homemaker Services[2]	$41,184	$55,348
Home Health Aide[2]	$43,472	$58,423
Adult Day Health Care		
Adult Day Health Care[1]	$16,900	$22,712
Assisted Living Facility		
Private, One Bedroom[3]	$47,196	$63,427
Nursing Home Care		
Semi - Private Room[4]	$80,483	$108,162
Private Room[4]	$92,688	$124,565

Home Health Care	2015	2030*
Homemaker Services[2]	$41,184	$64,163
Home Health Aide[2]	$43,472	$67,728
Adult Day Health Care		
Adult Day Health Care[1]	$16,900	$26,330
Assisted Living Facility		
Private, One Bedroom[3]	$47,196	$73,530
Nursing Home Care		
Semi - Private Room[4]	$80,483	$125,390
Private Room[4]	$92,688	$144,405

Genworth 2015 Cost of Care Survey, conducted by CareScout®, April 2015

[1] Based on 5 days per week by 52 weeks

[2] Based on 44 hours per week by 52 weeks

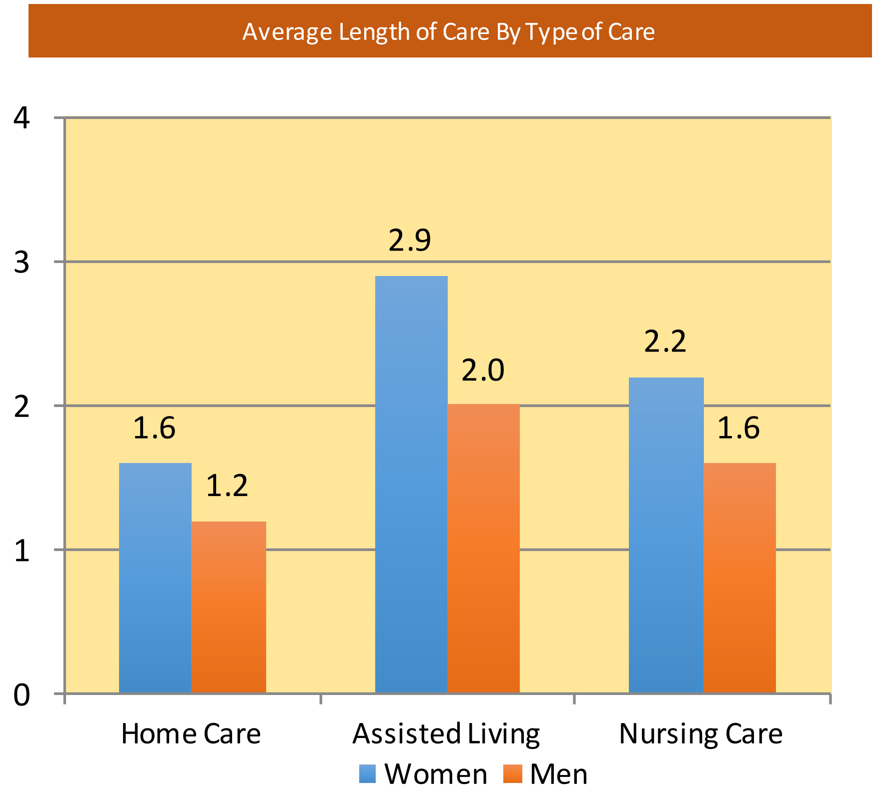
[3] Based on 12 months of care, private, one bedroom

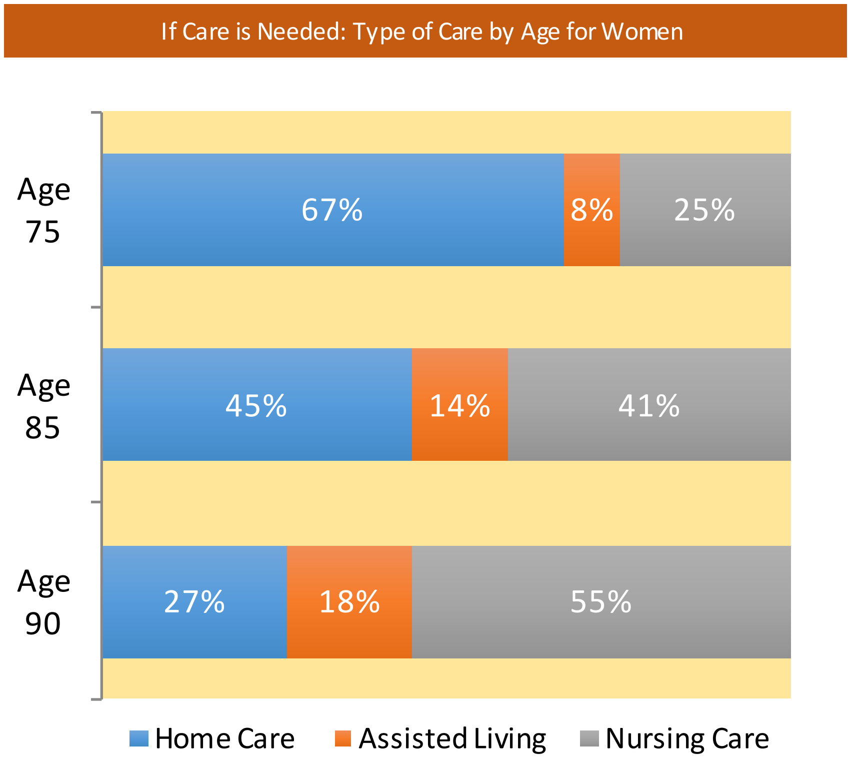
[4] Based on 365 days of care

* Estimates how much care might cost in future years based on 3% annual inflation

Estimated Cost

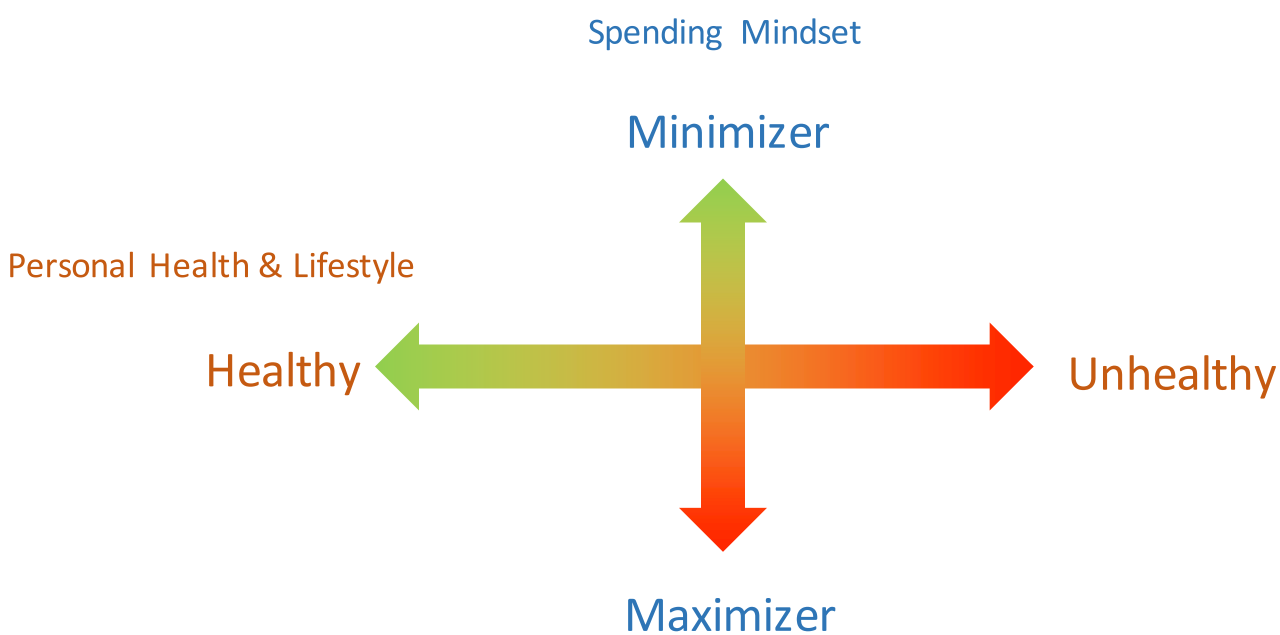
Length of Various Care Alternatives





Source: Data provided by HealthView using historical insurance claim data and actuarial projections, June 2011. Note: Type of Care utilized by Men by Age is Very Similar (Within 2%)

Two primary drivers of medical expense



Savings Needed for Medigap Premiums, Part B Premiums, Part D Premiums, and Out-of-Pocket Drug Expenses for Retirement at Age 65 in 2015 (EBRI Data)

Info from EBRI*	Median Drug Expenses Throughout Retirement	90th Percentile of Drug Expenses Throughout Retirement
Men		
Median	$68,000	$104,000
90th Percentile	$124,000	$188,000
Women		
Median	$89,000	$136,000
90th Percentile	$140,000	$212,000

Source: EBRI.org, Employee Benefit Research Institute, Newsletter, October 2015, Vol. 36, No. 10

Retirement Income Planning

Health Costs Analysis – Unhealthy Lifestyle

- High health care user/unhealthy lifestyle
  - Lower longevity & higher health care expenses
  - $188,000 men/$212,000 women (90th percentile EBRI)
  - Add shorter term LTC costs[1]:
    - 2 Years - $160,000
  - Total:
    - $348,000 men
    - $372,000 women

- Low health care user/unhealthy lifestyle
  - Lower longevity and median health care expenses
  - $68,000 men/$89,000 women (50th percentile EBRI)
  - Add shorter term LTC costs[1]:
    - 2 Years - $160,000
  - Total:
    - $228,000 men
    - $249,000 women

[1] Assumed to be 2 years of nursing care – semi-private room

Retirement Income Planning

Health Costs Analysis – Healthy Lifestyle

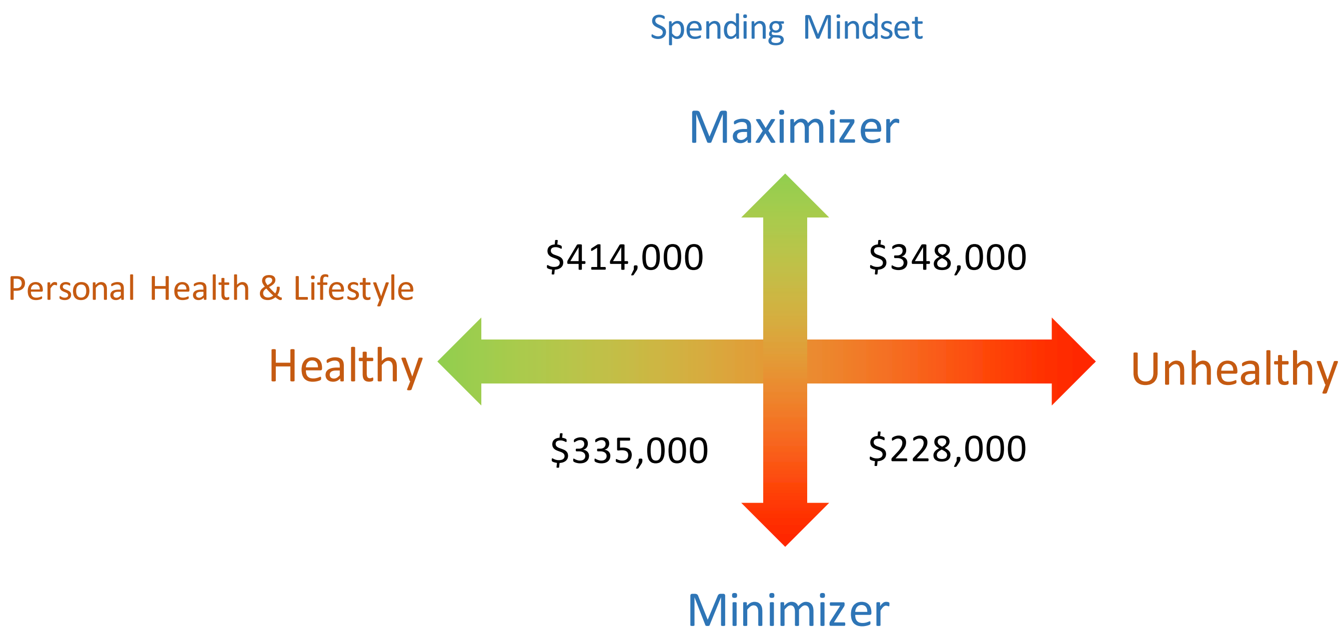
- High health care user/healthy lifestyle
  - Higher longevity & higher health care expenses
  - $124,000 men/$140,000 women (90th percentile EBRI)
  - Add longer term LTC costs[1]:
    - 5 Years - $290,000
  - Total:
    - $414,000 men
    - $430,000 women

- Low health care user/healthy lifestyle
  - Higher longevity and low health care expenses
  - $45,000 men/$45,000 women[2]
  - Add shorter term LTC costs[1]:
    - 5 Years - $290,000
  - Total:
    - $335,000 men
    - $335,000 women

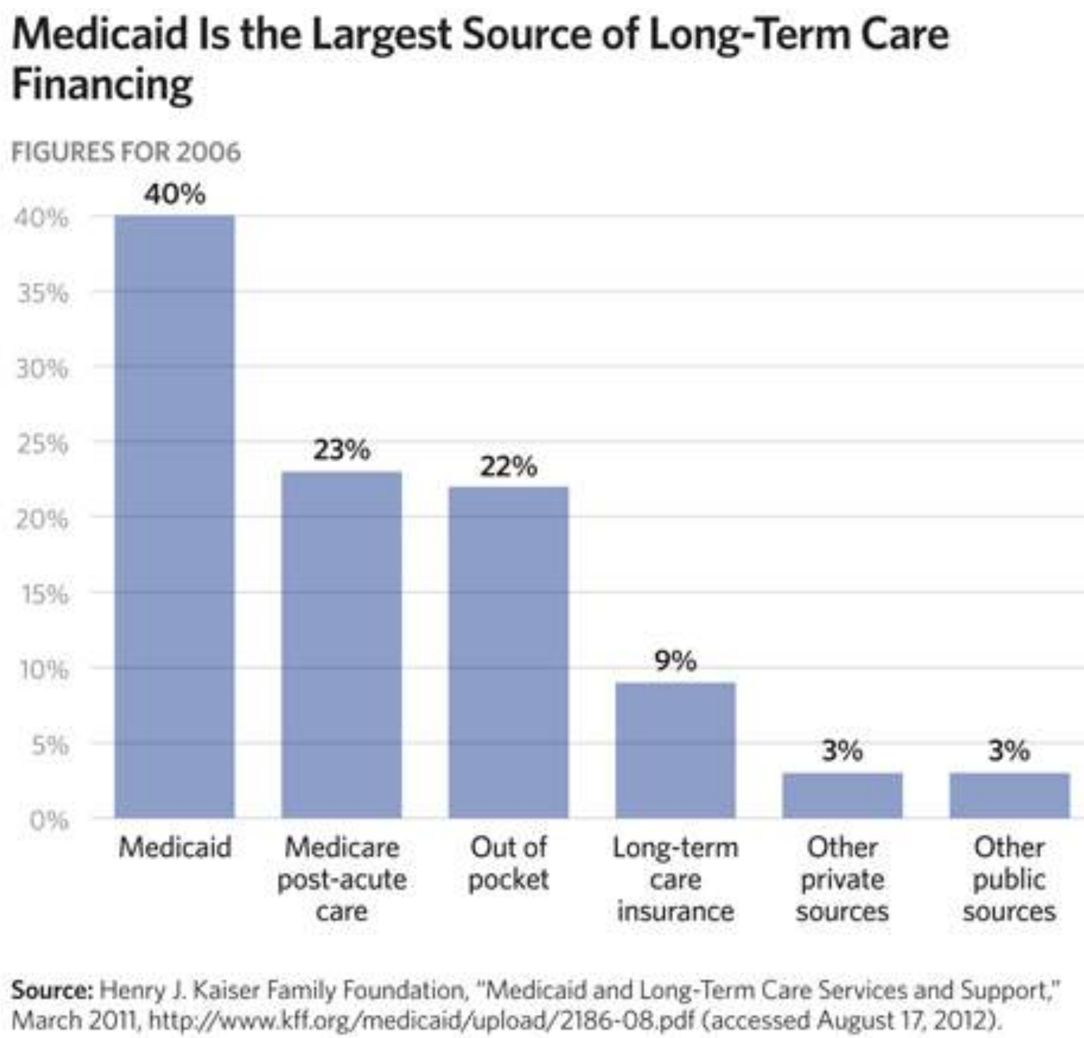
[1] Assumed to be 3 years assisted living and 2 years of nursing care – semi-private room

2 $45,000 is lump sum needed to fund Medicare premiums

Two primary drivers of medical expense - Women



Percent of Long-Term Facility Care



Medicaid eligibility requires patients spend down their personal assets until they fall below their state's minimum amount.

Medicare only covers a portion of costs associated with short-term rehabilitation.

A large portion of costs are paid out-of-pocket or from other private sources (34%).

Meeting Cash Flow Needs

Public & Private Alternatives

- Government Insurance Programs
  - Medicaid
  - Medicare – Only covers acute care & not chronic
- Private Insurance:
  - Medigap & Medicare Advantage
  - Long-Term Care (Reimbursement or Indemnity)

What's going on with LTC?

What’s going on with LTC?

“Executives misjudged everything from how much elder care would cost to how long people would live. Result: these policies are costing insurers billions.”
FA Magazine, March 3, 2015

Five primary headwinds for the industry:

1. Increasing Cost of Elder Care
2. Historically Low Interest Rates
3. Lapse Ratios – Projected to be 6% actually less than 1%
4. Demographics: Graying of America
5. “Use It or Lose It”

Long-Term Care Alternatives

	Self-Insure	Traditional LTCi	LI w/ LTCi Rider	Asset-Based LTCi	VA w/ LTCi Rider
Description	You bear the full risk of future LTC needs. The only assistance is your private health insurance and Medicare (which is limited).	You pay premiums for a LTC coverage, affordable way to cover the larger LTC risk, by paying small amounts annually.	You invest in a cash-value insurance product (WL/UL/VUL) – and select your LTC coverage terms in the rider. Once you trigger your LTCi coverage, it comes out of your policy's DB. At death, your beneficiaries get remainder of your insurance.	You invest in a cash-value Universal Life policy with upfront premiums (1/3/5/7/10 years), which has a LTC rider built in. Initial pool of funds offers a leveraged Death Benefit of ~200%, and LTC of ~500%. LTC benefits are deducted from DB.	You invest in a fixed annuity, and select a LTC coverage rider for extra fee (1.5 – 3% annually). Your LTC benefit is typically 200% of premium paid.
Best Use	High Net Worth Individuals	Individual with limited budget	Individual who needs both DB and LTCi	Individual with excess funds or income	Individuals who have Underwriting Issues
Pros	You can choose what care you desire. No lost premiums.	Low Initial cost of coverage. Inflation rider available in some cases	If you don't need LTC, your beneficiaries receive death benefit , Indemnity coverage available	Leveraged DB and LTC benefits, underwriting typically less stringent. No ongoing premiums.	Retain access to funds. Lower cost than LTC policy. No Underwriting
Cons	Outside of private or social programs you are impacted by the full cost of LTC, and future inflation.	Premiums can increase. No cash value component. Underwriting required. Use it or lose it.	Can be expensive if death benefit is not necessary. Requires underwriting. Does not qualify for State Partnership programs.	Large upfront premium. Less benefit than standalone options. Does not qualify for State Partnership programs.	Large upfront premium. Expensive. Low current rates of return. Does not qualify for State Partnership programs.

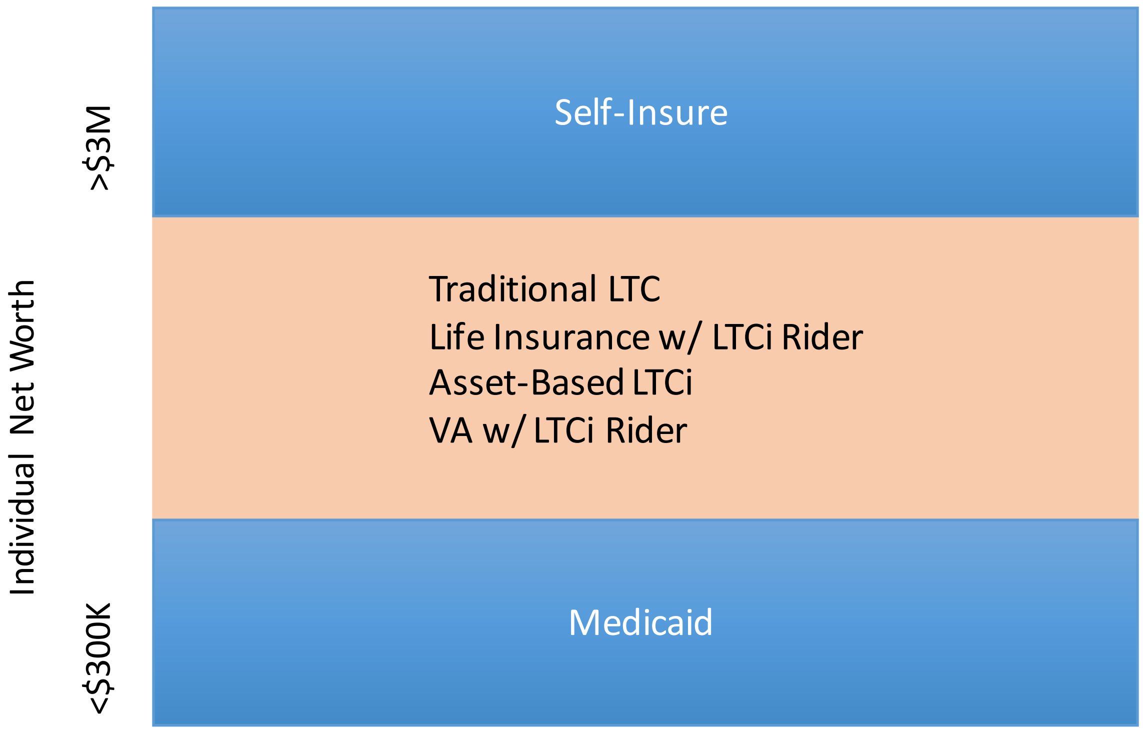
Cash Flow Planning

Sustainable Savings Withdrawal Rates

Note: Portfolio 50% Equity & 50% Bonds

Source: Money Magazine: Retirement Guide 2014

Who Should Purchase LTC Insurance?



- Popular heuristics say that if individuals have a net worth below $300K they should not consider purchasing LTCi and spend their estates down to the Medicaid levels.
- Also, if net worth is above approximately $3M then they should consider self-insuring, since the probability of prematurely running out of funds is low.
- Lastly, there are many options in between these two levels as previously noted, each depending on the individuals unique circumstances.

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